Appln. No. 10/086,860

Amdt. dated June 20, 2005

Reply to Office Action of April 1, 2005

Amendments to the claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1. (currently amended)

A dental implant comprising a body portion and a head portion, said body portion comprising a tip portion remote from said head portion, said body of said implant having an external thread including 1) a lead thread portion adjacent said tip portion, 2) an intermediate thread portion adjacent said lead thread portion and 3) a distal thread portion, adjacent said head portion, wherein said thread of said lead thread portion, said intermediate thread portion and said distal thread portion comprises a cutting edge so that said implant is self-tapping said dental implant further comprising a central bore within said head portion and a an internal thread within said bore for receiving a dental prosthesis, and wherein said tip portion comprises at least one cutting edge for cutting bone to form a bore as said implant is rotated, said body portion comprising at least one flute, said flute having a first end adjacent said at least one cutting edge of said tip portion for assisting removal of bone cuttings from said cutting edge, said body portion having an axis and said cutting edge of said tip portion commencing at said axis and extending radially outwardly from said axis so that upon rotation of said implant in a patient's jaw, said implant is self-drilling and self-tapping.

Claim 2. (original)

The dental implant of claim 1 wherein said body portion has a general longitudinal axis and said body portion comprises an outer surface and said at least one flute extends along said outer surface of said body portion in a direction substantially parallel to said axis.

Claim 3. (original)

The dental implant of claim 1 wherein said implant comprises at least two said cutting edges and at least two said flutes.

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Claim 4. (original)

The dental implant of claim 2 wherein said implant comprises two said cutting edges and two said flutes.

Claim 5. (original)

The dental implant of claim 2 wherein said flute extends from said tip portion along said lead thread portion and said intermediate thread portion of said body portion.

Claim 6. (previously presented)

The dental implant of claim 5 wherein said flute has a distal end and said distal end is adjacent a proximal end of said distal thread portion.

Claim 7. (original)

The dental implant of claim 5 wherein said flute has a flute surface and said surface of said flute is roughened to assist in osseointegration.

Claim 8. (original)

The dental implant of claim 7 wherein the surface of said lead thread portion and the surface of said intermediate thread portion of said body portion are smooth.

Claim 9. (currently amended)

The dental implant of claim 5 wherein said lead thread portion comprises a thread having at least three revolutions.

Claim 10. (previously presented)

The dental implant of claim 9 wherein said thread has a crest and a crest line joining the crest of said three revolutions of said lead thread portion extends radially outwardly, distally, relative to said general longitudinal axis.

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Claim 11. (previously presented)

The dental implant of claim 10 wherein a crest line joining the crest of the thread of said intermediate thread portion and said distal thread portion is substantially parallel to said axis.

Claim 12. (currently amended)

The dental implant of claim 11 wherein <u>said thread has a root</u> and a root line extending through the root of the thread of said intermediate portion and said distal portion is parallel to said axis and is displaced from said axis a root distance and wherein said at least one cutting edge extends from said axis radially outwardly to a respective cutting edge end and said cutting edge end is displaced from said axis, a cutting edge distance and wherein said root distance is greater than said cutting edge distance.

Claim 13. (currently amended)

The dental implant of claim 12 15 wherein the difference between said root distance and said cutting edge distance is not greater than one third of said root distance.

Claim 14. (original)

The dental implant of claim 13 wherein said difference is not greater than five percent (5%) of said root distance.

Claim 15 (new)

A dental implant comprising a body portion and a head portion, said body portion comprising a tip portion remote from said head portion, said body of said implant having an external thread including 1) a lead thread portion adjacent said tip portion, 2) an intermediate thread portion adjacent said lead thread portion and 3) a distal thread portion, adjacent said head portion, wherein said thread of said lead thread portion, said intermediate thread portion and said distal thread portion comprises a cutting edge so

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that said implant is self-tapping said dental implant further comprising a central bore within said head portion and an internal thread within said bore for receiving a dental prosthesis, and wherein said tip portion comprises at least one cutting edge for cutting bone to form a bore as said implant is rotated, said body portion comprising at least one flute, said flute having a first end adjacent said at least one cutting edge of said tip portion for assisting removal of bone cuttings from said cutting edge, said body portion having an axis and said cutting edge of said tip portion commencing at said axis and extending radially outwardly from said axis so that upon rotation of said implant in a patient's jaw, said implant is self-drilling and self-tapping, wherein said body portion has a general longitudinal axis and said body portion comprises an outer surface and said at least one flute extends along said outer surface of said body portion in a direction substantially parallel to said axis, and wherein said flute extends from said tip portion along said lead thread portion and said intermediate thread portion of said body portion, and wherein said lead thread portion comprises at least three revolutions, and wherein said thread has a crest and a crest line joining the crest of said three revolutions of said lead thread portion extends radially outwardly, distally, relative to said general longitudinal axis, and wherein a crest line joining the crest of the thread of said intermediate thread portion and said distal thread portion is substantially parallel to said axis, and wherein said thread has a root and a root line extending through the root of the thread of said intermediate portion and said distal portion is parallel to said axis and is displaced from said axis a root distance and wherein said at least one cutting edge extends from said axis radially outwardly to a respective cutting edge end and said cutting edge end is displaced from said axis, a cutting edge distance and wherein said root distance is greater than said cutting edge distance.

Claim 16. (new)

A dental implant comprising a body portion and a head portion, said body portion comprising a tip portion remote from said head portion, said body of said implant having an external thread including 1) a lead thread portion adjacent said tip portion, 2) an intermediate thread portion adjacent said lead thread portion and 3) a distal thread

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portion, adjacent said head portion, wherein said thread of said lead thread portion, said intermediate thread portion and said distal thread portion comprises a cutting edge so that said implant is self-tapping said dental implant further comprising a central bore within said head portion and an internal thread within said bore for receiving a dental prosthesis, and wherein said tip portion comprises at least one cutting edge for cutting bone to form a bore as said implant is rotated, said body portion comprising at least one flute, said flute having a first end adjacent said at least one cutting edge of said tip portion for assisting removal of bone cuttings from said cutting edge, said body portion having an axis and said cutting edge of said tip portion commencing at said axis and extending radially outwardly from said axis so that upon rotation of said implant in a patient's jaw, said implant is self-drilling and self-tapping, and wherein said body portion has a general longitudinal axis and said body portion comprises an outer surface and said at least one flute extends along said outer surface of said body portion in a direction substantially parallel to said axis, and wherein said thread has a root and a root line extending through the root of the thread of said intermediate portion and said distal portion is parallel to said axis and is displaced from said axis a root distance and wherein said at least one cutting edge extends from said axis radially outwardly to a respective cutting edge end and said cutting edge end is displaced from said axis, a cutting edge distance and wherein said root distance is greater than said cutting edge distance.

Claim 17 (new)

The dental implant of claim 16 wherein said flute extends from said tip portion along said lead thread portion and said intermediate thread portion of said body portion.

Claim 18 (new)

The dental implant of claim 17 wherein said flute has a distal end and said distal end is adjacent a proximal end of said distal thread portion.

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Claim 19 (new)

The dental implant of claim 18 wherein the difference between said root distance and said cutting edge distance is not greater than one third of said root distance.

Claim 20 (new)

The dental implant of claim 19 wherein said difference is not greater than five percent (5%) of said root distance.